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USING DESIGN THINKING AS A STUDENT-CENTERED APPROACH TO ENHANCE AN UNDERGRADUATE LEADERSHIP PROGRAM

Abstract

It is widely understood that distinctive leadership programs must engage in assessment, and intentional program improvement practices. Design thinking can serve as one student-centered tool that engages students in the assessment process, while looping feedback into substantive programmatic changes. This paper explores the use of this innovative practice to enhance a co-curricular leadership program at a large university in the Southeastern United States. Practitioners found that design thinking was a useful supplemental assessment tool that led to positive programmatic changes that were focused on students' needs.

Introduction

Design thinking is a process that uses the core principles of design to identify innovative solutions, solve problems, and enhance the user experience (Adams & Nash, 2016). The early work related to design thinking started from the Palo Alto based design firm, IDEO, which focused on bringing innovation to their clients in product design (Zuber et al., 2005). One of the unique aspects of how IDEO engaged in the design thinking process was their purposeful engagement of team members from diverse professional backgrounds (Brown, 2008). Their inclusion of other academic and professional disciplines opened the door for design thinking to move beyond the design field. As a result, this process has been adopted as a way to solve complex problems in a variety of industries including health care, computer science, and business (Brooks, 2010; Uehira & Kay, 2009).

The purpose of this innovative practice paper is to show how design thinking can be utilized as a tool for assessment and leadership program improvement. Georgia Southern University's Office of Leadership and Community Engagement is home to the Southern Leaders Program, a multi-year co-curricular leadership program that focuses on undergraduate leadership development. In order to further improve and assess the Southern Leaders Program, administrators from the program engaged students in the design thinking process. In this paper we examine how each of the five stages of design thinking were conducted and the outcomes that came from this process.

Review of Related Scholarship

Design Thinking as a Framework

Previous work with design thinking in educational environments revealed the process as one that generated effective educational interventions and theory (Van den Akker et al., 2005). The action research nature of design thinking provided educational researchers a guide to both design and study interventions that could solve practical problems (Stokes, 1997; Schoenfeld, 1999; Lester, 2005). Additionally, through the implementation of design thinking's clearly defined process that integrates both scientific and design methods, it has been found to produce useful educational interventions that solve identified problems of practice (Easterday et al., 2014). For this reason, we believed this innovative approach could be used to improve our leadership program. The design thinking process used in our innovative practice included the following stages (Stanford D.School, n.d.):

Empathize: This starting point involves observing others in their environment, engaging stakeholders in informal interviews, and attempting to become immersed in the users' experience. The goal of this stage is to understand the people who are affected by your challenge.

Define: Taking key insights from the empathize stage, teams now attempt to more fully understand the problem and create a frame for the problem. The goal of this stage is to develop a problem statement that evokes action.

Ideate: Next, teams generate possible solutions to the problem while bringing their understanding of the problem and stakeholder input to bear. The goal of this stage is to have a wide range of possible solutions while delaying judgement on the best option.

Prototype: In this stage teams select a few previously generated ideas and develop simple prototypes while expending very little resources. The goal of this stage is to develop a storyboard, role play, or physical object that can be used to elicit feedback from users on your potential solutions.

Test: Teams test their prototypes with users and garner critical feedback to be used in refining the prototypes. The goal of this stage is to engage in an iterative process of gaining feedback and adjusting prototypes until the team has arrived at a more refined solution.

Design Thinking in Assessment and Program Improvement

Design thinking has been previously applied as a tool for assessment and program improvement purposes (Cahn et al., 2016; Carson & Hannum, 2018; Marra et al., 2018). Benson and Dresdow (2014) explored this unique methodology for faculty to use in the assessment of management education programs. They posited that design thinking may lead to more transformative assessments because it "...helps address the challenges of moving assessment

from measurement with incremental improvements to transformation for substantive change" (Benson & Dresdow, 2014, p. 451). One example of this transformative assessment practice occurred through the revamping of the student graduation portfolio at Manhattanville College (Carson & Hannum, 2018). Over time, the institution's portfolio process became ineffective as it tried to connect to evolving curriculum, and faculty had less time to help students submit quality portfolios (Carson & Hannum, 2018). A committee formed at the school utilized design thinking to revitalize their student portfolio requirement for graduation. The process led to the creation of an optional, four-course pathway to graduation that incorporated an e-portfolio. An early assessment of the program indicated that the program was meeting a legitimate need for the college.

Design thinking was also used as a process to improve programming at adapted physical activity clinics at Indiana University-Purdue University Indianapolis (Marra et al., 2018). The clinics implemented physical activity programming for individuals with disabilities and were used as a service-learning site for undergraduate students. Graduate students employed design thinking through stakeholder interviews and clinic observations, which led to the development of new initiatives intended to increase programming and changes in student training. Also, infrastructure needs identified through the design thinking process included online registration, parking, and waitlist management.

A group of educators and researchers from the United States, Canada, and the United Kingdom used the design thinking process during a two day workshop to generate evaluation strategies related to healthcare education with a focus on accreditation standards and learning activities (Cahn et al., 2016). They engaged pre-licensure students from health-related fields and healthcare professionals in interviews to learn directly from those engaged in the learning from health educators. The process allowed them to address an issue they saw with how their previous evaluation efforts seemed to be focused on the end goal of patient outcomes rather than their intended outcome of increased collaborative practice of healthcare workers. They were able to identify a method to focus the evaluation of health education on the intended competencies needed to develop healthcare professionals.

Distinctive leadership programs should strive to engage in continuous program improvement (Eich, 2008; Guthrie & Jenkins, 2018). "Doing this by intentional program assessment followed by looping feedback to reevaluating the program learning outcomes, redesigning curriculum, and revising delivery" (Guthrie & Jenkins, 2018, p. 114). The design thinking methodology includes this looping feedback mechanism leading to actionable, substantive changes in programming (Benson & Dresdow, 2014). No examples of design thinking being utilized as a tool for leadership program improvement could be identified in our review of the literature. Therefore, design thinking deserves the attention of leadership educators as an innovative assessment practice.

Description of the Practice

The design thinking process was utilized as a method to gain insights from students engaged in the Southern Leaders Program, an undergraduate student leadership development program. Design Thinking was chosen in order to not only hear from our students, but to also identify potential areas for program improvement and as an assessment tool. Using the process for design thinking outlined by the Stanford D.School (n.d.) above, we began with the empathize stage and sought out students engaged throughout the various phases of the program.

We were interested in students' experiences in the program, and we attempted to have equal representation from each of the program's stages in our sample. To accomplish this, we used a sampling frame that used the total number of each stage of the program to invite students to participate in this process. We sought a total of five students from each stage, which was divided on students' classification or when they entered the program. The selection process was random in nature other than controlling for which stage of the program students were in. A total of nine students agreed to participate with an almost equal representation from each program phase; however, as focus groups were scheduled only five students participated, which turned most focus groups into semi-structured interviews.

In order to remove any potential restriction in students' responses during these interviews, no program administrators were involved in the interview process. Graduate teaching assistants conducted and recorded the interviews to allow students to freely share their thoughts and insights on their experiences in the Southern Leaders Program. The recordings of the interviews were later transcribed, and the transcriptions were reviewed for themes and key insights, which entered us into

the define stage of design thinking. The entire team, which included two program administrators and four graduate assistants, discussed the key insights and themes to identify a few areas that stood out as prominent issues across the transcripts. Four insights were moved forward by the team which included a lack of consistency and communication of program expectations; the necessity of student ownership and responsibility for their engagement in the program; a lack of community within the program; and the delicacy of the balance between challenging students and programmatic support. Our team defined how these four insights were connected and how our engagement in design thinking was to move forward through the following question: How might we develop student self-efficacy while providing student-centered programmatic support?

Once our guiding question was formulated from the define stage, we entered into the ideate stage of design thinking where we used the question to come up with ways in which we could address this challenge. A key factor in this stage of design thinking is that everyone's ideas are valuable, no matter how absurd or wild they may be. Stanford's D.School (n.d.) states this stage is more about coming up with a wide variety of ideas than the exact one to move forward. As such, our engagement in this process led to a diverse set of concepts connected to our guiding question to consider and three ideas from this process had elements our team decided to move forward in design thinking. These three ideas were to have staff advisors, create annual advisement sessions for students in the program, and develop curriculum roadmaps that detailed students' progression in the program.

As we entered the prototype stage of design thinking, we took those three concepts to guide our work. With design thinking, the prototype and test stages are iterative in nature as prototypes must be presented to stakeholders engaged in the process then refined through testing and then cycled back through prototyping until a solidified final design may emerge. Our prototype included both a tangible curriculum roadmap (See Appendix A) for students

and a conceptual framework for programmatic advisement. An important element to note of the prototype stage is that due to the iterative nature of the process, the goal is to not have a perfected product, but rather one that stakeholders can provide necessary feedback on through the test stage (Stanford d.school, n.d.).

With a rough prototype in hand, the graduate teaching assistants that previously engaged students during the empathize stage conducted follow up interviews with the same students to gather feedback in the test stage of design thinking. The students gave positive feedback to the prototype and students asked clarifying questions about the program based on what they were presented. All of the students stated they would be willing to participate in advisement sessions and claimed that it may lead to more commitment from their peers to the program. One student stated that the prototype "keeps people responsible on their own" and another said it "will definitely help with communication." Another statement made during the test stage was that "having an advisor explain what some of these things [program requirements] mean will also help." Beyond these statements, students also provided suggestions to enhance the prototype by saying advisement should be every semester rather than annually, they should be 20-30 minute meetings, the curriculum roadmaps should be available to download online as a template, and that advisors keep a copy of the roadmaps. This feedback from the test stage was reviewed by the team and later the Southern Leaders Program Advising Initiative was developed as a final product.

Discussion of Outcomes/Results

As described above, the Southern Leaders Program Advising Initiative was developed through our systematic application of the design thinking process. Advisement took place in the spring semester of 2019 with sessions completed in a group format that typically lasted 30 minutes per session. During advisement sessions, students were asked about

their progress in meeting program requirements for the current academic year. The Southern Leaders Program advisor recorded their students' progress on their Southern Leaders Program roadmap, which detailed all requirements for the year. Additionally, the advisors discussed upcoming events and requirements, as well as next steps for students to continue to advance in the program. The final step in the advisement session included a discussion of any questions the students had about the requirements or the program in general. The advisors then made a copy of the students' updated program roadmaps so both the students and the program would have the most up-to-date version of the students' progress.

Assessment data collected through an end-of-the-year survey revealed the efficacy of the advisement program. Of the 58 respondents, 100% agreed or strongly agreed that their advisement session gave them the information they needed to be successful in the program. Additionally, 56 of 58 students (96.56%) reported agreeing or strongly agreeing that their advisement session helped them to feel supported in their efforts to complete the program. These results indicate the objective of developing self-efficacy within students while also providing student-centered programmatic support was met by the Southern Leaders Program Advising Initiative. This substantive programmatic change was the result of incorporating design thinking as an innovative tool for assessment and program improvement.

Reflections of the Practitioner

Design thinking can be a useful tool to be added into leadership educators' assessment and program development plans. One major benefit of this process was its student-centered nature, which allowed us to gather insights directly from students in the program beyond them completing program evaluations or end-of-the-year surveys. Those elements previously existed in our assessment protocols but can sometimes paint a more limited picture of student learning or experiences based on the focus of the assessment. The design thinking process, however,

allows for the stakeholders engaged in the process to drive the focus of their needs forward.

Another major benefit related to design thinking is the leadership that is given to students involved in the process. Since we used a randomized process to recruit students to participate, the students that did engage with us were not all students that would have normally been recruited to provide insights. With a leadership program that engages around 400 undergraduate students, some students tend to be more engaged than others, yet this process gave students a voice who may not have been the ones who normally would have volunteered to provide such feedback. Of course, we would have liked to have more students engaged in the empathize stage of the process, but we did secure student representation from each stage of the program and had an outcome that demonstrated positive results. Students also appreciated knowing that we incorporated their feedback in the design of the advisement initiative.

Recommendations

The purpose of this innovative practice paper was to show how design thinking can be used as a tool for leadership program improvement and as a method of assessment. After engaging in the design thinking process, we would recommend other practitioners use design thinking to review their own leadership offerings. One recommendation to explore future application of the design thinking process would be to engage a larger group of users in the empathize stage. In our process we were able to engage five students. Another opportunity for future application would be to engage the students beyond the empathize and test stages. The process might be enhanced through incorporating students into the define, ideate, and prototype stages. This would enable the process of design thinking to be even more human centered throughout the practice.

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